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ABSTRACT

The vocational needs of rural America are discussed in this 2-part research synthesis. Part 1 discusses the problem from a sociological point of view. The author of this section considers demographic and ecological factors, the economy of rural areas, educational patterns, racial and ethnic factors, and political and legal implications. Recommendations for research are included. Part 2 looks at the problem from an educator's point of view. Discussion of vocational education in America focuses on curriculum, facilities and equipment, counseling and student personnel services, and teacher education. A bibliography accompanies each part of the document. (DB)

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review and synthesis of research on
**Vocational Education
In Rural Areas**

by
G. Eugene Griessman
and
Kenneth G. Densley



ERIC Clearinghouse on
RURAL EDUCATION AND SMALL SCHOOLS
NEW MEXICO STATE UNIVERSITY, Box 3AP
Las Cruces, New Mexico 88001



ERIC Clearinghouse
THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION
THE OHIO STATE UNIVERSITY, 1900 Kenny Road
Columbus, Ohio 43210

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and
Kenneth G. Densley

**REVIEW AND SYNTHESIS OF RESEARCH ON
VOCATIONAL EDUCATION IN RURAL AREAS**

I. A Sociologist's Perspective of Vocational Education Needs in Rural America

B. Eugene Griessman
Associate Professor of Sociology
Center for Occupational Education
North Carolina State University
Raleigh, North Carolina

II. Vocational Education In Rural America: An Educator's Perspective

Kenneth G. Densley
Acting Executive Secretary
Advisory Council on Vocational Education and Technical Training
State Department of Education
Sacramento, California

December 1969

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**ERIC Clearinghouse on
RURAL EDUCATION AND SMALL SCHOOLS
NEW MEXICO STATE UNIVERSITY, Box 3AP
Las Cruces, New Mexico 88001**

**ERIC Clearinghouse
THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION
THE OHIO STATE UNIVERSITY, 1900 Kenny Road
Columbus, Ohio 43210**

PREFACE

This *Review and Synthesis of Research on Vocational Education in Rural Areas* is a joint effort of the ERIC Clearinghouse on Rural Education and Small Schools and the ERIC Clearinghouse on Vocational and Technical Education. It was conceived as a means of assisting researchers in identifying methodological approaches to solving the substantive problems confronting educational practitioners who are charged with the responsibility of providing relevant education for rural people.

In the field of vocational and technical education, the pace of research and development activities have increased considerably during the period under review. Gaps which exist for some readers are probably the result of the authors' prerogative to be selective.

As economic, social, and political forces have reshaped the face of America, and as a burgeoning technology has heightened the requirements to participate in the employment sector, there has been evidence that rural area residents have been at a distinct disadvantage, whether they have remained in a rural community or have migrated to urban areas. This disadvantage has been the result of limited resources, smaller school units, and lower expectations, among other factors. This publication provides a review of some of these factors and synthesizes the problems, if not the solutions.

An interdisciplinary approach is taken to studying the problems of providing vocational technical education in rural America by having a sociologist and an educator review available research from their respective viewpoints. Overlap is unavoidable in such an undertaking, but it will be useful for the reader to be aware of differences and likenesses in the two perspectives.

Those who wish to examine the primary sources of information should utilize the bibliographies appearing at the end of each paper. Where ERIC document numbers and ERIC Document Reproduction Service prices are cited, the documents are available in microfiche and hardcopy forms. No attempt has been made to cite all of the available literature on any phase of the topic. However, a definite effort has been put forth to provide a compendium of relevant material.

The profession is indebted to B. Eugene Griessman and Kenneth G. Densley for their scholarship in the preparation of this report. Recognition is also due Max Amberson, Head of the Department of Agricultural Education, Montana State University; Norman F. Hyatt, Project Director, Integrated Career Development, Western States Small Schools Project; Clyde Eastman, Assistant Professor, Department of Agricultural Economics, New Mexico State University; for their critical review of the manuscript prior to its final revision and publication.

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Members of the profession are invited to offer suggestions for the improvement of the Review and Synthesis series and to suggest specific topics or problems for future reviews.

Everett D. Edington, Director
ERIC Clearinghouse on Rural Education and
Small Schools

Robert E. Taylor, Director
ERIC Clearinghouse on Vocational and
Technical Education

**A SOCIOLOGIST'S PERSPECTIVE OF VOCATIONAL
EDUCATION NEEDS IN RURAL AMERICA**

by
B. Eugene Griessman

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A SOCIOLOGIST'S PERSPECTIVE OF VOCATIONAL EDUCATION NEEDS IN RURAL AMERICA*

by
B. Eugene Griessman

One autopsy report for the *Saturday Evening Post* suggests that the venerable magazine collapsed because it persisted in telling the story of rural and small town America—a place that no longer exists. That report, however, is not entirely accurate. Even though rural America has changed, it is still very much in existence. In terms of the rural-urban continuum, 55.3 million people live here. This number is roughly twice that of the total population of Canada; it is more than the population of France, and five times the population of Portugal.

The currently fashionable interest in all things urban—migration to urban areas, city problems, and the relatively high proportion of urbanites in American society—tends to ignore the absolute size and functions of the rural population in the emerging mass society. While it is undeniably true that the direction of our society is set in the cities, the relationship is not exclusively one way. What happens in rural America also has implications for the society as a whole.

DEMOGRAPHIC AND ECOLOGICAL FACTORS

Not until 1920 did the U. S. become urban in the sense that the majority of the population lived in cities. Thus, in 1970 the United States will have completed only one-half century as an urban nation, a period shorter than a lifetime. It may well be that the present difficulties the nation faces in coping with critical urban problems grow out of inexperience (Hauser, 1969:6).

During the first sixty years of this century, the increase in urban population absorbed 92 percent of the total population growth in the nation. "In the decade 1950 to 1960, the increase in urban population absorbed more than 100 percent of total national growth; that is, total rural population, including nonfarm as well as farm, actually diminished for the first time" (Hauser, 1969:6).

Most social scientists feel that the "population explosion" in this nation is still under way. Recent projections indicate that if present trends continue, the metropolitan population, between 1960 and 1985, will increase by some 58 percent while the non-metropolitan population will increase by about 12 percent. By 1985, then, 71 percent of the people in this nation would reside in metropolitan areas compared to 63 percent in 1960. In an important summary

*Author's Note. This paper delineates several characteristics and trends in rural America that are germane to occupational education. The perspective is sociological. It is not encyclopedic in the sense that all the available literature on any given topic is cited; but, an attempt has been made to provide a useful compendium of relevant material. This topical review should provide the reader with a list of references which will enable him to locate further detailed information on a given subject.

of demographic changes between 1950-1960, Donald J. Bogue and Calvin L. Beale observe:

To the person with rural interests, the greatest impression from current trends may be the conclusion that demographic changes in rural communities have never been more radically different from those in urban communities—metropolitan or non-metropolitan—than they are today. This is not to contradict the fact that in many material aspects of life, rural and urban communities are more similar than they were a decade ago. For example, rural areas are closing the gap in availability or possession of electricity and electrical appliances, telephones, indoor water and bathroom facilities, automobiles, and hard-surfaced roads. However, never before have there been so many rural areas declining in population at a time when most urban areas are growing so rapidly. Never before have there been such differences in the age distribution of farm and nonfarm population as there are now, nor such disparities in the direction in which the age distributions are changing. Never has the number of deaths approached or exceeded the number of births in rural counties as it is beginning to do in some areas today, in contrast to the large natural increase of population being recorded in the cities. The differences between rural and urban population trends is such that in many rural areas the problem is to find economic uses for land that will retard depopulation, whereas in urban areas the problem is often how to choose among competing demands for land use, caused by high population growth (Bogue and Beale, 1964:124).

The population pyramid in rural areas indicates relatively high proportions of the young and the old. The farm population has a heavy base of young children under eighteen and a very small young adult group who are 18-34 years old. Farm people 60-69 years old outnumber those who are 20-29 years old. This characteristic of the farm population is due in part to heavy outmigration of young adults over the last several decades.

Migration has occurred despite the reluctance of rural people to relocate. A great many have moved primarily because job opportunities were limited locally (i.e., "frictional unemployment"). Much of the migration has been sporadic and unplanned. The migrants typically have been ill-equipped for the journey and the new urban setting. In Appalachia, for example, the problem of moving to nearby metropolitan centers has been heightened by the fact that many rural people do not relocate until their savings and resources are exhausted.

The shape of the rural population pyramid suggests that rural areas are making heavy investments (in terms of ability to pay) educating youngsters who often migrate to urbanized areas for their economically productive years. As a whole, the rural population is remaining rather constant while the urban population is increasing in size. This means that if allocations for education are made on the basis of total population figures—which often shape political decisions—rather than on the composition of the population, urban areas will receive a disproportionate share.

ECONOMIC CONSIDERATIONS

The Rural Labor Force and the Occupational Structure

The Decennial Census of Population is an important source of information about economic trends. The researcher who makes use of these data, however, should be aware of certain problems involved in the enumeration (Hathaway *et al.*, 1968:147). First, the statistics refer to the occupation and industry of employment during the week prior to the enumeration. Second, the classifications allow only one occupation or industry per person, although it is known that farm operators are often multiple job holders. The classification listed in the Census data, however, is the one occupying the greatest portion of the respondent's time during the period in question. Third, much of the really useful data, since it is not available on a yearly basis, is often "dated" before the reports appear.

An analysis of these data indicates that the largest changes in the rural occupational structure since 1940 have occurred among rural-farm males. The major decline in farm occupations was not among farmers and farm managers but among farm laborers and farm foremen. Women have continued to move out of households into offices and factories. Unlike males, however, no appreciable increase since 1940 is indicated in the proportion of females employed as professional, technical, or kindred workers (Hathaway *et al.*, 1968:149).

The labor force in rural areas was estimated in 1966 to be approximately twenty million persons.¹ This estimate represents a small increase over the 1950 and 1960 levels of about 19 million. Apparently, the continued decline in farm employment has been offset by increases in the participation of rural people in nonfarm occupations.

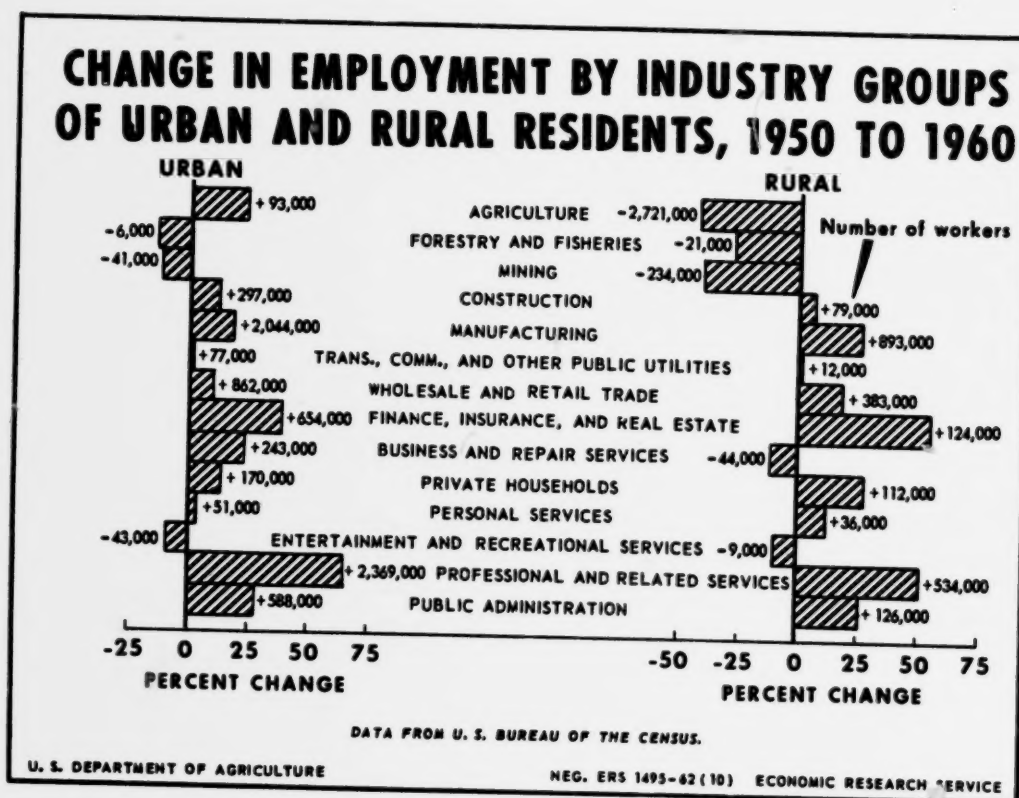
The occupational and industrial composition of the rural labor force has been substantially altered during the present decade. (See Figure 1.) The changes that have occurred may be summarized as follows: (1) extractive industries have declined; (2) manufacturing and various types of trades and services have sharply increased; (3) other industries have increased moderately; (4) farming and laboring occupations have declined; and (5) all other major occupations have increased (U. S. Department of Agriculture, 1966:14).

Agribusiness

Rural America connotes, for many people, a place of farms and farmers. Farming, for this reason, deserves a measure of attention in the present discussion. The adjustment that is presently taking place in rural America is primarily an adjustment in the production of food and fiber.

An increasing number of rural people, no longer classified as farmers, are engaged in "agribusiness" occupations. *Agribusiness* is defined as the manufacture and distribution of farm supplies, plus the processing, handling, merchandising, and marketing of food and agricultural products, plus farming

FIGURE 1



Source: U. S. Department of Agriculture. *Rural People in the American Economy*. Agricultural Economic Report No. 101. Washington, D. C.: Economic Research Service, October, 1966, p. 13.

itself.² It also includes such services as those of veterinarians and repairmen, as well as public or private creditors.

The farm, at the center of the agricultural economy, is increasingly linked with other economic systems through the use of purchased inputs . . . and with nonfarm marketing services The trend to agribusiness is but an illustration of the more complex division of labor that occurs as societies change from traditional to modern. While the labor force has decreased, the nonfarm agricultural labor force has grown. Estimates place about 6 million workers on the agricultural supply side and 10 million on the marketing side. When combined with farm workers, these supply and marketing agribusiness men constitute 23 million workers in the total agricultural economy (Larson and Rogers, 1964: 49,50).

Decentralization of Industry

Rural people—both male and female, farm and nonfarm—are turning to industry as a primary source of livelihood or as a supplement for income derived from farming. Unfortunately for these people, the industries attracted to rural communities, especially the more remote communities, are low-paying industries. In terms of employment they are not usually rapid growth industries. They are typically textiles, food and kindred products, apparel, wood products, lumber, furniture, and various kinds of manufacturing operations. "Of these industries only apparel manufacturing experienced rapid employment increases for 1960-1965 (President's National Advisory Commission on Rural Poverty, 1967:103).

Typically, an industry that selects a rural location for a new plant site does not employ many skilled workers. If it does, most of these are imported from other geographical areas. In one study of rural industrialization, the researchers reported that 60 percent of the workers were nonwhite, they were relatively young, had relatively little school or formal job training, and were, for the most part, engaged in unskilled or semi-skilled work. They generally received minimum wages. However, their level-of-living improved considerably and was reflected in ownership of refrigerators, washing machines, automobiles, television sets, etc. Employees and non-employees alike felt that the plant had been beneficial to the community. The researchers found that these workers "had little knowledge of the labor market and indicated they would hesitate to move even if they knew of job opportunities elsewhere" (Bertrand and Osborne, 1959:6).

The Technological Revolution

"One of the strangest features of modern American agriculture," Edward Higbee observed, "is that farm income stagnated during years when technical efficiency made some of its greatest gains" (Higbee, 1963:11). In the decade 1948-57, production per man-hour on farms increased 48.6 percent while the improvement in other industries was only 25.5 percent. During the 1950's the average annual increase in production per agricultural worker was approximately 6 percent. Outside of agriculture it was under 3 percent. At the end of 1960,

capital investment for each worker in agriculture was \$21,300 compared with \$15,900 for each worker in other industries. "In 1961 one farmer produced enough food for twenty-six³ persons whereas in 1940 his efforts had fed only eleven persons" (Higbee, 1963:11).

The technological revolution in agriculture that has resulted in surplus production and surplus farmers is partly mechanical, partly genetic and chemical, and partly attitudinal. It is mechanical in that new machines have reduced unit costs. Mechanization has eliminated the need for unskilled hired labor in the production of corn, wheat, and cotton; and mechanical devices are taking over jobs in fruit, vegetable, and tobacco production. The revolution is genetic and chemical in that mass production is possible because improved germ plasm, fertilizers, and pesticides are available. The technological revolution is attitudinal in that producers of food and fiber are willing to accept new ideas. Indeed, vast organizations have come into being for the express purpose of disseminating new ideas and practices.

The details of this technological revolution have been dealt with in a number of publications and require no comprehensive treatment here. Perhaps the most important development, in terms of this paper, is the sheer number of individuals who have been displaced by the rapid changes that have occurred. In order to function in the economy, they must either be absorbed by other occupations or be retrained so that they can make use of new farming equipment and practices. This same observation is relevant for forestry as well as farming, where the same trend toward mechanization is evident.

Adjustments in Size of Farm Units

"Factory farms" have become a vital part of the American agricultural economy. Already the top 3 percent of the United States farm units—elite mechanized operations—produce more than the bottom 78 percent. "It is the amazing productivity at the very top of American agriculture which sets the sizzling pace for all the remainder. Unless the magnitude and intensity of this competition is grasped, it is impossible to understand why the majority of farmers are in trouble" (Higbee, 1963:50).

The President's National Advisory Commission on Rural Poverty has pointed out:

We believe technological advance in agriculture will continue at such a high rate that problems of adjustment from farm to nonfarm employment will be continual. This advance in agriculture will not assist the rural poor We believe a viable commercial farm economy has major national benefits, and the farms should be sufficiently large and efficient to sustain incomes above the poverty level with a minimum of public assistance to those engaged in full-time farming. However, those farmers unable to attain or maintain viable farm units, and without nonfarm income to bring them above the poverty level, need assistance either in gaining access to nonfarm sources of income, or increases in farm income, or both (The President's National Advisory Commission on Rural Poverty, 1967:142).

Changing Land Use

A shift in land use from agriculture to urban development and industry-oriented complexes is continuing. Large acreages near cities are being converted from food production to residential areas in order to fulfill the requirements of the expanding urban population. Additional vast acreages are lost to highway and powerline rights-of-way, airports, industrial sites, and water impoundments. About 1 million acres every year are converted from agriculture and woodlands to serve these other uses. Much of the land goes under concrete.

These changes amount to a formidable barrier for the older farmer wishing to expand his operation; but they are particularly restrictive to the young man planning to enter agriculture as a farm owner. Rising prices of farm land, higher tax assessments, plus the required heavy investment in machinery and equipment mean that capital outlays in excess of \$50,000 are not unusual.

Today's young men who wish to become farmers cannot be brought into farming operations as owners unless they are able to obtain sizeable amounts of capital. This problem is tempered somewhat by the loan-making function of the Farmer's Home Administration, but it is still formidable. In fact, a "tight" money market may well cancel out this advantage.

The present farm population is an aging population. This demographic fact, plus the previously mentioned need for large capital outlays, presage further changes in agriculture. Farm corporations and contract farming seem to figure large in the shape of things to come.

Occupational education programs designed to prepare young people for farming would do well to train them in skills adaptable to corporation and contract farming operations. Education in leadership, labor relations, and in the social skills necessary for functioning in relatively complex organizations seem appropriate, along with training in the use of new machinery and technologies.

The Economics of Aesthetics

"One of the glories of man," Oliver Wendell Holmes once observed, "is that he does not sow seed and weave cloth, and produce all the other economic means simply to sustain and multiply other sowers and weavers . . . After the production of food and cloth has gone on for a certain time, he stops producing and goes to a play, or he paints a picture, or asks unanswerable questions about the universe and thus delightfully consumes a part of the world's food and clothing . . ." (Holmes:213). Man and aesthetics thus seem to be inseparable. Though the aesthetic and artistic drives are obscure in their origins and functions, they are universally represented.

The national investment in art, entertainment, and recreation is immense. Rural America stands to profit the most from this big business in the rapidly growing field of outdoor recreation. More and more rural areas are being devoted to multiple uses that include tourism, camping, and recreation (U. S. Department of Agriculture, 1966:39). Obviously, this means new occupational opportunities for rural Americans.

It is equally true that a dearth of "cultural" opportunities in a geographical region hampers economic growth. Corporation employees at the middle and

higher management levels are reluctant to relocate in an area that they regard as a "cultural Siberia." They also dislike the idea of sending their children to small schools that lack well-rounded curricula. Small-town businessmen attempting to attract industry into their area are sometimes oblivious of these considerations.

Occupational Aspirations and Job Attainment

Comprehensive studies on career patterns of rural people are needed. Perhaps the closest approach yet made is the growing body of literature that deals with the occupational aspirations of rural people.⁴ No general agreement, however, has been reached about the salience of occupational aspirations for actual job attainment. In one important recent study the researchers concluded that aspirations "perform mediational functions" among such factors as the student's mental ability, his parent's socioeconomic status, his school performance, and the influence of "significant others" (Sewell *et al.* 1969:82-92). They found the latter variable—the influence of "significant others"—to have considerable explanatory power.

RACIAL AND ETHNIC CONSIDERATIONS

In 1790, the first Census of the United States records that Blacks comprised about 20 percent of the population. By 1930 the proportion of Blacks diminished to less than one-tenth of the population. In the decades since 1940, however, their growth rate has been greater than that of the white population so that by 1969 the proportion had risen to slightly more than 11 percent (Hauser, 1969:6).

Over 90 percent of all Blacks lived in the South in 1790. Migration to the North occurred throughout the 19th Century, but it was not until during World War I that a mass exodus began. This was prompted by the need for wartime labor and the diversification of agriculture. During and after World War II the migration of Blacks from the South greatly increased. As a result, the proportion of Blacks located in the North and West almost quadrupled between 1910 and 1960, increasing from 11 to 40 percent (Hauser, 1969:6).

This migration has resulted in an urban-rural redistribution. In 1910, seventy-five percent of the Blacks lived in rural areas. Fifty years later, 73 percent resided in urban areas. The fact that within such a brief time a people has been transformed from rural to urban, to an extent even greater than that of the white population, has great social significance.

Even so, an estimated 31 percent (1966) of the Black population still live in smaller cities, towns and rural areas (U. S. Department of Labor and U. S. Department of Commerce, 1967:9). Moreover, important familial linkages persist between urban and rural Blacks. For example, children of urban Blacks are often reared by their grandparents or other relatives in rural areas (Liebow, 1967:Ch. 3).

Population projections based upon present trends indicate that by 1985 the concentration of nonwhites in central cities (as defined in 1960) will increase to 58 percent from the 51 percent level of 1960 (Hauser, 1969:6). There is an

indication, however, that these projections will not be realized. A study recently released by the Census Bureau and the Department of Labor reports that the northward migration of Blacks from the South tapered off in 1966, and with the movement of some Blacks into suburbs in the past two years, their numbers in major cities have been reduced by 300,000.⁵

The educational attainment of nonwhites, nationwide, is uniformly lower than that of whites although the gap has recently narrowed. (See Table I and Table II.) For the first time, a majority of young nonwhite men 25 to 29 years old have a high school diploma, and contrary to the picture six years ago, they tend to have more years of schooling than nonwhite young women.⁶

A historical fact of note is the long-standing debate among Black leaders about the nature and quality of educational programs appropriate for Blacks. The antecedents of this debate lie in the divergent approaches of Booker T. Washington who advocated "industrial education" for the masses, and W.E.D. Du Bois who instead advocated broadly educating the talented few as a first priority (Lomax, 1962:45-51).

Even though Blacks constitute America's largest minority group, training needs are also acute among Indians and persons of Spanish-American descent. For example, the Indian Education Center estimates that in 1967 Navajo adults on the reservation averaged less than two years formal schooling. Approximately 8,000 Indian children were out of school, in many instances because no educational facilities were readily available (President's National Advisory Commission on Rural Poverty, 1967:51).

Among reservation-dwelling Apaches the scholastic achievement of teenagers falls consistently below non-Indian norms, dropout rates are high, and absenteeism is a chronic problem. Few Apaches advance beyond high school and none, as yet, have graduated from college. According to one study the apathy of Apache children toward formal schooling may be attributed in part to the exigencies of living on a reservation. When unemployment and poverty are widespread, eking out a living takes precedence over everything else (Parmer, 1968). Here, as elsewhere, long-standing patterns of discrimination along economic and occupational lines continue to affect vocational aspirations, the wage structure, and the training opportunities for young and old.

The problems of unemployment, underemployment, and lack of occupational training are chronic in many rural areas; but these problems are typically heightened for rural American minorities. The usual pattern is that these peoples receive the least adequate education; they drop out sooner; they are last to be hired and first to be fired.

EDUCATIONAL PATTERNS

In 1960 there were more than 700,000 adults in rural America who had never enrolled in school. An additional 3.1 million had received less than five years of formal schooling. More than 19 million had not received a high school diploma (U. S. Department of Commerce, 1960).

TABLE I

Percent Enrolled in School, by Age, 1960 and 1966

	1960		1966	
	Nonwhite	White	Nonwhite	White
5 years	51	66	66	74
6 to 15 years	98	99	99	99
16 and 17 years	77	85	83	89
18 and 19 years	35	40	39	48
20 to 24 years	8	10	14	21

Source: *Social and Economic Conditions of Negroes in the United States*. Washington, D. C.: U. S. Government Printing Office, BLS Report No. 332, Current Population Reports, Series P-23, No. 24, October, 1967, p. 46.

TABLE II

Educational Attainment of Persons 25 and 29 Years Old,
by Sex, 1960 and 1966

	Male		Female	
	Nonwhite	White	Nonwhite	White
Median years of school completed:				
1960	10.5	12.4	11.1	12.3
1966	12.1	12.6	11.9	12.5
Percent completing 4 years of high school or more:				
1960	36	63	41	65
1966	53	73	49	74

Source: *Social and Economic Conditions of Negroes in the United States*. Washington, D. C.: U. S. Government Printing Office, BLS Report No. 332, Current Population Reports, Series P-23, No. 24, October, 1967, p. 46.

When judged by national averages, education in rural America ranks low in educational achievement of students, average years of schooling, and allocation of resources that go into the system. Rural students drop out sooner and the percentage of those who go to college after completing high school is much lower than for urban youth. In 1960, the proportion of urban versus rural youth enrolling in college was about two to one (U. S. Department of Health, Education and Welfare, 1965:117).

Rural schools typically pay low teacher salaries and thus are at a disadvantage in attracting and holding well-qualified teachers. Small communities have fewer high school teachers with five or more years of college and more elementary teachers without a college diploma. "The percentage of rural teachers not properly certified is about twice as high as for urban teachers" (President's National Advisory Commission on Rural Poverty, 1967:41).

Approximately 24 percent of the small high schools had no librarian and 59 percent had only a part-time librarian. However, almost all of these schools had libraries. Courses offered in over 75 percent of the schools included English, history, mathematics (through plane geometry), science, home economics, typing, bookkeeping, and shorthand (U. S. Department of Agriculture, 1966:23).

A U. S. Office of Education Survey (while based on data more than 14 years old) points up some rural-urban school system difference (U. S. Department of Health, Education and Welfare, 1955-1956). Of the characteristics selected for comparison, rural and smaller school systems are at a marked disadvantage. (See Table 3)

In fairness to rural schools, their strengths must be mentioned. Teacher-pupil ratios are often relatively low making individualized instruction possible. Extremes of wealth, except along racial or ethnic lines, usually are not great in rural areas. Thus, stratification into cliques along class lines has not been an acute problem. Drug use tends to be much less widespread. With some obvious exceptions, school pupils in rural areas tend to be drawn from stable, relatively permanent families. This tends to make for close social patterns between families.

The rural school has been much more of a community institution than the city school. Furthermore, the one-room schoolhouse, once the symbol of antiquated education, has been rediscovered as an early prototype of the modern "ungraded" school system.

Consolidation has been an important development in most rural areas during the past few years. In the decade from 1954 to 1964, the number of school districts was halved, but nearly all of the estimated 9,900 one-teacher schools still in operation in 1964 were located in rural areas (Advisory Commission on Intergovernmental Relations, 1968:22).

The sources of financial support for education in the U. S. vary widely. Some states are more dependent upon tax revenues than others. In 1962, for example, over 70 percent of the general revenue of independent school districts in Illinois and Nebraska came from taxes; less than 10 percent came from this source in New Mexico and Alabama. When support is derived from taxes, the property tax

TABLE III

Selected Characteristics of Rural and Urban School
Systems in the United States, 1955-1956

Subject	Rural Systems	Independent city school systems by size of city		
		2,500— 9,999	10,000— 24,999	25,000 or more
Average enrollment:				
Per elementary school	107	324	382	576
Per secondary school	177	436	781	1,136
Average number of teachers:				
Per elementary school	3.7	11	13	18
Per secondary school	8.7	20	33	47
Average salary of instructional staff	\$3,123	\$4,034	\$4,375	\$5,068
Average current expenses per pupil	\$221	\$273	\$286	\$321
Average expense for instruction per pupil	\$152	\$195	\$211	\$234
Expenditures for transportation per pupil	\$21	\$10	\$5	\$3
Percent of systems with kindergarten	27	58	62	73

Source: U. S. Department of Health, Education, and Welfare, Office of Education. "Statistics of Rural Schools," a U. S. Summary, 1955-56. Rural School Survey Circular No. 565.

Advisory Commission of Intergovernmental Relations, *Urban and Rural America: Policies for Future Growth*, Washington, D. C.: U. S. Government Printing Office, April 1968, p. 22.

provides nearly all—98 percent—of total tax revenues (U. S. Department of Agriculture, 1966:21).

Not many years ago high school graduation was considered to be the final step in the formal education process for most young people. At that time attrition rates were high, but persistent students managed to survive, and a few went on to college. More recently the high school orientation, rural and urban, has come to focus upon college preparation. Unfortunately, this orientation tends to ignore those who seek a terminal high school diploma as well as the dropout.

In the case of the dropout, approximately 28 percent of those who enter the eighth grade are not in school when their class graduates.⁷ Their career needs deserve further attention by occupational educators. Furthermore, the high school graduate who does not go on to college often approaches the labor market with practically no entry skills.

There are indirect indications, though little research evidence, that some urban problems have been exacerbated by the influx of poorly trained, uneducated rural people. Surely one of the obsessions rural educators must divest themselves of is the notion that occupational education should focus upon narrowly perceived employment needs of one geographical area.

The "growth center" concept that is proposed in the report of the President's Advisory Commission on Rural Poverty (President's National Advisory Commission on Rural Poverty, 1967:103ff) deserves attention by rural educators. Possibly this focus upon regional growth centers in rural areas for the purposes of occupational education is a practical compromise between parochial and nation-wide interests.

Personality Adjustment of Rural Youth

As though not enough problems presently beset rural youth, there is evidence that problems of personality adjustment can be added to the list. In a study recently reported, a standardized personality adjustment test was administered to rural, town, and city boys. The data indicated that rural youths were the most poorly adjusted, followed by town and city youths. The investigators suggest that there is perhaps a "rural factor" emerging that is linked with poverty and that it will affect personality adjustment (Nelsen and Storey, 1969:43-55).

Conceivably, the inability of the educational systems to provide training relevant to the aspirations of rural youth creates a frustrating dichotomy between what a youth desires and what he can reasonably expect to obtain. The findings of this study, however, are at variance with earlier studies. These suggested that rural-urban differences were diminishing as a result of an increasing interdependence between rural and urban areas. Earlier writers suggest that interdependence meant urbanization of rural areas to the point that rural dwellers would come to approach urban dwellers in terms of personality adjustment, personality traits, orientations, and attitudes. (See Table IV for a summary of findings from earlier studies.)

TABLE IV

Personality Adjustment of Youth . *Nelsen and Storey*

APPENDIX

Summary Chart. Research studies of rural-urban adjustment and personality

Study	Date of Report	Location	Focus of Study	Test Used	Order of High to Low Adjustment
Sewell & Amend	1943	Okla.	personality differences	Minn. Scale	no difference
Duvall & Motz	1945	Middle-west	adjustment	own	no difference
Stott	1945	Neb.	adjustment	CTP ^a	farm youth in village schools > nonfarm youth > farm youth in 1-room schools
Mangus	1948	Ohio	adjustment	CTP	farm children > nonfarm children
Landis	1949	Wash.	adjustment	Bell Adj. Inventory	no difference
Nye	1950	Mich.	adolescent and parent adjustment	own	city families > farm families
Haer	1952	Wash.	personality: conservatism	mod. Centers scale	no conservatism-radicalism differences
Osborne, Greene, & Sanders	1952	Ga.	adjustment	Bell Adj. Inventory	no difference
Burchinal et al. Hamilton County	1957 (1950 data)	Iowa	adjustment	CTP	no difference

Burchinal et al. Marshalltown	1957 (1956 data)	Iowa	adjustment	CTP	no difference
Burchinal, Hawkes, & Gardner	1957	Iowa Ohio Kans., Wis.	adjustment	Rogers Test of Pers. Adj.	no real difference
Munson	1959	N.Y. (& N.Y.C.)	adjustment	CTP	suburban and urban > town > rural youths
Hathaway, Monachesi, & Young	1959	Minn.	personality differences	MMPI	differences were found; adjustment levels not discussed
Middleton & Grigg	1959	Fla.	aspirations	own	aspirations: urban > rural
Burchinal	1961	Iowa	personality: religious conservatism	Levinson religious cons. scale	no differences found
Haller & Wolff	1962	Mich.	personality differences	CTP; others	rural boys had higher scores on personality adjustment
Willits & Bealer	1963	Pa.	personality: conservatism	own	rural were more conservative; differences not considered important

^aCalifornia Test of Personality.

Source: Hart M. Nelsen and Stuart E. Storey, *Personality Adjustment of Rural and Urban Youth: The Formation of a Rural Disadvantaged Subculture*. *Rural Sociology*, Vol. 34, No. 1, March 1969, pp. 43-55.

Vocational Agriculture and Homemaking Education

In many rural schools the opportunities for occupational education are limited to course offerings in either vocational agriculture or homemaking education. Vocational agriculture programs are conducted in 9,151 (1966) high schools and a few junior colleges. (Enrollment figures are given in Table V.) A typical curriculum includes five subjects: production of farm crops and livestock, marketing of farm products, farm business management, soil management, and improved citizenship and rural leadership. Students generally enroll in the ninth grade and complete the program in the twelfth grade.

Grant Venn calls it "paradoxical" that during the past decade "agricultural enrollments have grown 8 percent in the face of the loss of 3 million agricultural jobs between 1947 and 1962" (Venn, 1964:74). According to the Smith-Hughes Act, vocational agriculture was to be a program devoted to training "present and prospective farmers for proficiency in farming." In actual practice the program has evolved as a basically flexible educational approach to general rural problems. The increased efficiency of the American farmer must be attributed in part to the success of vocational agriculture programs. Ironically, the success of the program itself has provided arguments for its own extinction.

The difficulty now is that farming opportunities are non-existent for many rural youths to the extent that only a third of the 70 thousand yearly graduates of the vocational agriculture program remain in farming. With farm jobs vanishing at the rate of 250 thousand a year, it is estimated that only one out of every ten youths now living on farms can look forward to employment on commercially profitable farms in 1970. Yet in the great majority of high schools in rural America, vocational agriculture is the only pre-employment course offered (Venn, 1964:75).

Cutbacks in funds for vocational agriculture courses have been resisted on the grounds that agribusiness is expanding so rapidly that it more than offsets the diminished size of the farm labor force. To be an effective argument, however, it must be demonstrated that vocational agriculture courses prepare people for the wide range of jobs encompassed by agribusiness.

The largest federally supported vocational program in the high school is homemaking or home economics. Typical curricula include courses in foods and nutrition, clothing, housing, home equipment and furnishings, child rearing, family relations, and consumer education. The primary objective of the program has been to prepare girls for homemaking responsibilities. (See Table V.) The program is vocational only in the broadest sense; until recently, the program has not attempted to prepare people for jobs.

POLITICAL AND LEGAL CONSIDERATIONS

During the past two decades the number of laws and policies designed to assist various segments of the rural population have proliferated. They provide for loans, grants, subsidies, and access to resources. Some are available to farmers and their families. The rural American may or may not know about them. If he

TABLE V

Enrollment in Vocational Education Classes, by Type of Program for Selected Years

Year	Total	Type of Program						
		Agriculture	Distributive	Health	Home Economics	Office	Technical	Trades and Industry
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1966	6,070,059	907,354	420,426	83,677	1,897,670	1,238,043	253,838	¹ 1,269,051
1965	5,430,611	887,529	333,342	66,772	2,098,520	730,904	225,737	1,087,807
1964	4,566,390	860,605	334,126	59,006	2,022,138	-	221,241	1,069,274
1963	4,217,198	827,827	309,593	53,957	1,839,450	-	184,595	1,001,776
1962	4,072,677	822,664	321,065	48,985	1,725,660	-	148,920	1,005,383
1961	3,855,564	805,322	306,083	47,264	1,610,334	-	122,952	963,609
1960	3,768,149	796,237	303,784	40,250	1,588,109	-	101,279	938,490
1959	3,701,121	757,223	310,591	30,769	1,585,860	-	48,564	968,114
1958	3,629,339	775,892	282,558	27,423	1,559,822	-	-	983,644
1948	2,836,121	640,791	292,936	-	1,139,766	-	-	762,628
1938	1,810,082	460,876	36,008	-	627,394	-	-	685,804
1928	858,456	144,901	-	-	175,944	-	-	537,611
1918	164,186	15,453	-	-	30,799	-	-	117,934

1/ Includes 3,666 enrolled in Fishery occupations.

Source: U. S. Office Of Education. *Vocational and Technical Education Annual Report, Fiscal Year 1966*. Washington, D. C.: U. S. Government Printing Office, May, 1968, p. 80.

is poor, in all likelihood he does not. Nonetheless, the rural American often stereotyped as a rugged individualist, more and more has become enmeshed in the governmental structure. His participation in it, even if not required by law, often proves to be the difference between success and failure.

Major changes in political institutions have occurred since the turn of the century. The following themes, from a discussion by the sociologist Robin M. Williams, Jr. seem germane to the present topic:

1. Growth in the size of government operation and the scope of activities and issues in the "public domain."
2. Increased structural complexity in governmental organization and in the relations of governmental organizations to the environing society.
3. Vast growth in "administrative law" and administrative discretion. Basic policy decisions are being made outside the constitutional allocation of powers.
4. Enormous expansion in size, scope, and importance of military forces and their supporting agencies.
5. The disappearance of even a limited degree of isolationism from international politics.
6. Emergence of the "Welfare State," dedicated to maintaining certain minimal safeguards for health and economic welfare.
7. High development of organized interest groups, which propose or "veto" nearly all important legislation. The unorganized "general public" retains only an episodic and delayed power to ratify or reject whole programs of governmental action.
8. Increased use of Federal powers in the field of civil rights and political liberties.
9. Varied manifestations of strain and alienation in the political arena, ranging from antifuoridation campaigns to White Citizen's Councils and the John Birch Society. (Williams, 1964:3-38).

Local rural communities are linked to the wider society by an increasing number of centralized organizations that have local representatives in the rural community. Thus, the political system as a whole has moved in the direction of greater interdependence, centralization, formality, and impersonality.

With the growth of interdependence, small communities have come increasingly under the influence of forces originating outside the local

area; e.g., economic changes, mass media, migration of population, political influences, and extra local organizations. Decreasing localism shows itself in many forms. A well-known, but striking, example is the continuous decrease in the number of public school districts from 127,000 in 1932 to 49,000 in 1958—while public school enrollment was increasing from 26.5 million to 33.8 million. Never before in history have so many local areas been so permeable to external forces.⁸

Smaller political entities, by themselves, seem increasingly unable to provide the services that Americans have come to consider necessary for "the good life." Despite avowals of independence by influential persons in many quarters, governmental linkages are a permanent part of the political landscape.

Under the present political system a need exists for individuals who know where the resources are and how to get them. Rural areas are typically at a disadvantage because few local residents possess the requisite knowledge or contacts to facilitate governmental linkages. "Few counties, towns, and cities have sufficient resources to alter significantly their conditions, growth rates, or potentials. They all too often lack professional help in their planning" (President's National Advisory Commission on Rural Poverty, 1967:103).

The Changing Power Structure in Agriculture

The system of organized agricultural power in the United States, for the last four decades, has been in a stage of serious and extensive readjustment.⁹ Traditional organized agricultural power in the United States has been based on several elements: (1) technical knowledge and expertise in its dissemination, (2) the ability to influence the appropriation process within state legislatures and Congress, (3) access to all levels of institutions in American society by systematic organizational linkages and coalitions, (4) direct ties at the community level with the political party as the chief locus of power (Sower and Miller: 1964:132,133).

In the past decade organized agricultural power has declined in its effectiveness in attaining its goals and has often been involved in changes of self-interest. It is with increasing difficulty that agricultural interests are able to obtain appropriations and other resources to maintain long-established activities. This has resulted from population shifts, reapportionments of legislative bodies, and an increased visibility of the business and industrial sector in relation to the political party processes. "Closely related to this phenomenon is the persistent shift in orientation of the political institution to large urban centers, not only for votes, but because the centers of party power are increasingly found there (Sower and Miller, 1964:135). Sower and Miller describe a new mood as one wherein:

The farm organizations still are attempting to hold and influence members, with goals which are scarcely new, with members who can obtain technical expertise almost anywhere The Extension Services, confronted as a national system with a range of impact due to industrialism, are attempting successively different formats in the hope of

strengthening the old and discovering new centers of support. And with the absence of definitive alternatives to the economic paradox of domestic agriculture, together with the orientation of American society to internationalism, the structure of agricultural power is perfused with agricultural problems rather than with opportunities. Hence there rises occasional interorganizational contests, a mood of watchfulness about the old alliances, and trial and error in keeping viable a system of agricultural power (Sower and Miller, 1964:143).

DISCUSSION, RECOMMENDATIONS AND SUGGESTIONS FOR RESEARCH

The Functions of Occupational Education for Youth, Rural or Urban

Contemporary social science knows little more than the bare outline of rural youths' career profiles. "It is strange to note," James Copp writes, "that rural sociology lacks a sociology-of-occupations tradition dealing with rural occupations" (Copp, 1964:345).

We do know that the experience of rural youths is similar to urban youths when they seek jobs. A young man, rural or urban, seeking to become an auto mechanic, for example, will generally find few established shops that will hire him unless he "knows someone" or has experience. He is at an obvious disadvantage without entry qualifications.

If, however, he has enrolled in a training program at a high school or technical institute, this program participation may serve a job entry function. Even though lacking in polish or experience, the program graduate can be hired as a mechanic's helper or trainee. The important point is that he does not come to the prospective employer totally "green."

Unfortunately, a rural youth may not obtain these entry qualifications if his vocational program does not provide him with marketable "work skills," or if school teachers or counselors advise him to avoid vocationally-oriented courses. School teachers and counselors are important "gatekeepers" in the high school setting. These individuals typically favor the college prep orientation for promising young people. This orientation, of course, reflects their own life experiences inasmuch as they themselves are college products; but it tends to ignore the fact that even the student who goes to college may work at an outside job. The fact that he has no occupational skills will probably mean long hours and a low paying job. Because he competes for unskilled or semi-skilled jobs (such as grocery "bag boy" or motel desk clerk) that might be otherwise filled by less well-trained individuals, the college student may deprive others of an earning opportunity. If he were equipped with occupational skills in high school, his college experience could be more rewarding.

The implications are more far-reaching. Whenever educational institutions encourage the bright students to avoid exposure to occupational training, marginal students tend to be recruited. If carried to its extreme, this means that occupations such as auto mechanic would be largely comprised of below-average high school graduates or dropouts. It is related to the quality of service that can be expected of this occupation, and others like it, that are vital to the smooth functioning of our economy.

Problems of Providing Qualified Instructors, Up-to-date Equipment, and Adequate Curricula in Rural Schools

A master craftsman teaching in school can often earn substantially more if he leaves the school and enters private industry. A dilemma is created for the administrator. If he pays a competitive salary, he may bring about a conflict between "regular" faculty and those in occupational education.

The dilemma is really academic, as far as the local administrator is concerned, but the consequences are real. Instructors in occupational programs must meet state certification standards and be paid according to state schedules. Salaries set by state schedules are often unrealistic, and the educational institution is therefore at a disadvantage in competing for highly qualified instructors.

Insofar as curricula and equipment are concerned, it should be borne in mind that local boards of education tend to be influenced by: (1) practical rather than academic interests; (2) immediate rather than long-range plans; (3) parochial rather than state or nation-wide perspectives. Local businessmen and politicians see to it that local interests are protected. Thus, if a local area does not directly benefit from a particular training program, support is not likely to be forthcoming.

Political considerations loom large in decisions about educational programs. For example, dropouts generally occur among the children of the poor. It is rather obvious that the poor, unless well organized, have little power and little voice in matters that affect their children's welfare. This may account for the fact that programs for potential dropouts are typically weak or non-existent.

If plans are implemented that surmount these obstacles, they are usually initiated at regional, state, or national levels. This approach, however, is not without its disadvantages. Programs initiated outside the local community may be mismatched to local needs. Even the sound approach may be viewed as outside "interference."

Regional Planning Programs in Rural Areas

Several government programs aim at coordinating governmental services, implementing training programs, and bringing industry to rural regions. One of the most promising of these experimental programs is Concerted Services in Training and Education. In this program, now under way in five states, the primary focus has been that of stimulating change by initiating and coordinating action among a number of individuals, groups and agencies. The key to the program is a "coordinator" who not only coordinates, but also serves as a catalyst and legitimizer. As a consequence of Concerted Services, new education programs have been initiated and participation in existing programs has increased (Griessman, 1969). Programs of this type have promise for improving training resources and occupational opportunities in rural areas.

Utilization of Vocational Agriculture and Homemaking Courses to Teach "Work Skills"

Agricultural educators have justified maintenance of their programs at former levels of funding on the grounds that agribusiness enterprises are expanding. This

is an accurate observation, but if it is to be a cogent argument, agriculture educators should be careful to prepare their students for the "work skills" that are required in agribusiness. ("Work skills" may be thought of as competencies common to a broad range of occupations.)

In some areas efforts are already being made to modify the curriculum and adapt the program to broader needs. The components of these programs include: (1) mechanical skills applicable not only to tractors but automobiles as well; (2) marketing techniques; (3) home maintenance; (4) basic electrical and carpentry techniques and concepts; (5) human relations skills. It is the author's opinion that further experimentation along these lines is warranted. Transferability of skills and practical training in the social requirements that are appropriate to the factory or office need to be given high priority.

Agricultural educators concerned with occupational education in rural areas should consider new course titles for broadly conceived programs. Course titles that include terms such as "agribusiness" may be useful in attracting rural students and justifying the program to urban politicians who often assume that "agriculture" means only farming.

Any serious attempt at modifying vocational agriculture and home economics so that they will include a broader range of vocational skills will mean retraining of teachers, rethinking the curricula, and rewriting the textbooks. Special funding for these needs seems appropriate.

Access to Basic Educational Resource Materials

It is unrealistic to suppose that occupational education can thrive apart from a vigorous educational environment. The rural student typically is at a disadvantage in his access to museums, art galleries, and libraries. Programs that utilize mobile units are commendable, but they fall short of adequately substituting for nearby well-equipped facilities. Furthermore, the rural student, especially the economically deprived, often has little reading material in his home. A surprising number of rural residents do not receive daily newspapers or magazines. Almost none of the economically deprived rural youth have access to up-to-date encyclopedias, except in the school library. This handicaps students in preparing reports, term papers, etc. The likelihood that a family on an income of \$60 to \$80 per week would purchase a \$250 encyclopedia is not great.

The author therefore suggests a federally funded experimental program that would place basic resource materials, such as dictionaries and encyclopedias, in homes where family economic resources would not otherwise permit these purchases. When purchased in large quantities their costs would be relatively low. School assignments could be made from them, so they would be used, and safeguards could be built into the program so that the materials would be cared for. Such a program would serve to offset one disadvantage that the rural student faces in obtaining a quality education and would probably benefit not only youngsters but older members of the household as well.

Implementation of Short Courses in Various Skills and Adult Basic Education

The technical institutes and, in some instances, local high schools could be utilized to upgrade the skills of rural people who prefer to remain in their

communities rather than migrate. If these courses were offered in regional centers, assistance grants, particularly for transportation, would be needed for many of the potential enrollees.

The Regional Center

Some course offerings are not practical for a small rural school. The equipment may be too costly or there may not be a sufficient demand to justify a staff. In some cases, specialized instruction is required. The services of the Supplementary Education Centers established under Title III of the Elementary and Secondary Education Act of 1965 seem to offer promise for meeting this need. Many of these centers have a collection of professional materials that may be used for reference. Schools are encouraged to avail themselves of these resources whenever they consider program improvement. By means of publications, meetings, consultations, conferences, workshops, surveys, and project development, these Centers are presently attempting to stimulate the development of improved programs and methods. Furthermore, specialists in particular areas may be shared, through the Centers, with local school districts.

Utilization of School-Business-Industry Cooperative Programs

Programs such as Industrial Cooperative Training (ICT) offer opportunities for some rural youths. ICT enables the high school student to gain on-the-job training while completing his school curriculum. He also earns a wage ranging from approximately \$1.00 to \$2.50 per hour (based upon age, occupation and experience). It would appear that this approach meets the previously discussed needs of inexperienced rural youths. In rural areas, however, the wider utilization of the concept is limited by the scarcity of industries and businesses that could appropriately enter into such a cooperative relationship with the schools.

Streamlining Administrative Procedures in Implementing Education Programs

As a general rule, governmental funds for projects, no matter how needful, are not appropriated unless a proposal has been prepared, submitted, reviewed, approved, and funded. The time and effort involved in this process, when multiplied for many geographical areas, is enormous. The drain upon the resources of highly trained and skilled individuals, who might profitably be engaged in other activities, is difficult to justify. It is particularly dysfunctional in rural areas where individuals with expertise in resource development are relatively scarce. The process of writing a proposal tends to heighten expectations. If the proposal is not funded, enthusiasm is dampened. As a result the future effectiveness of educators and change agents may be seriously impaired. These deleterious consequences of proposal rejection in programs of planned change have been documented elsewhere (Griessman, 1968).

A brief outline of one proposed modification of the procedure for rural areas is as follows: (1) submission of an initial prospectus (or query) of limited length; (2) approval-disapproval of the prospectus; (3) if approved, funds would

be provided for proposal development and, perhaps also, the assignment of an agency fact-finding team.

In this manner initial investment of resources would be kept at a minimum and further involvement would be reimbursed. The provisions of funds for proposal development would enable rural groups to obtain the assistance of professional consultants and would thereby tend to minimize the advantage highly staffed urban groups often have in competition.

SUMMARY

This paper must end on a pessimistic note. There is little reason to believe that the problems of rural areas which beset occupational education will rapidly improve. Several factors, internal and external, account for this.

Effective forces for change within the rural sector are few. Teacher training programs and curricula often reflect older and narrower approaches, existing funding legislation tends to restrict innovation, and rural people—the population that is served—are known to be conservative. This is not to say that rural areas are entirely devoid of exemplary programs. Rural schools in some areas equal, if not exceed, urban schools in the excellence of their occupational programs. These, however, are exceptions.

Changes from without are not likely either. Urban people are concerned about their own problems. Even if rural people mounted a concerted effort for improved and innovative programs, their diminishing political power would make it a tough battle.

In short, rural people are content with comfortable, traditional patterns and urban people are content to let them be. Meanwhile, the dropout rate continues; rural youth, often ill-equipped, migrate to the cities; underemployment lingers; and the gap between rural and urban per capita income widens.

Some problems are not peculiarly rural. For instance, the problem of securing competent instructors in occupational programs is faced by rural and urban schools alike; but even this need is more acute in rural areas. One possible solution involves joint programs with industry, On-the-Job Training, and the like. Here again, rural schools are at a disadvantage because of the sparsity of rural industries and businesses that can accept trainees.

Because of apathy and reluctance to change from within, and lack of concern from without, existing patterns probably will remain undisturbed. In some rural areas a net economic growth will occur because of the decentralization of some urban manufacturing concerns. This will typically take place in growth centers and workers will commute from the hinterland. Generally, however, matters will slowly worsen—when compared with urban and suburban areas—before they improve. A really sizeable change is likely only if matters worsen to the extent that the nation comes to view its rural problem with alarm. The Luke Principle seems to forecast the future all too well: "Whosoever hath, to him shall be given; and whosoever hath not, from him shall be taken even that which he seemeth to have."

NOTES

¹The "Labor Force" refers to persons 14 years old or over working or actively looking for work. This estimate is by the Economic Research Service, U. S. Department of Agriculture. See *Rural People in the American Economy*. Washington, D. C.: Economic Research Service, Agricultural Economic Report No. 101, October, 1966, p. 12.

²The term was coined by John H. Davis in "From Agriculture to Agribusiness," *Harvard Business Review*, No. 34: 107-115, 1956.

³Actually the productivity ratio would be considerably higher than 1:26 if the number of sub-marginal "farmers" were not calculated in the statistic.

⁴A bibliography of literature on status projections of youths has been prepared: William P. Kuvlesky and George W. Ohlendorf, *A Bibliography of Literature on Status Projections of Youth*. College Station, Texas: Texas Agricultural Experiment Station, Texas A&M University, Department Information Report No. 6710, 6711, 1967; see also communications published in *Rural Sociology*, Vol. 33, No. 3 (September, 1968), pp. 349-356.

⁵Reported in *Life*, September 13, 1968, p. 47; see U. S. Department of Commerce, U. S. Department of Labor, *Social and Economic Conditions of Negroes in the United States*. Washington, D. C.: U. S. Government Printing Office, BLS Report No. 332, Current Population Reports, Series P-23, No. 24, October, 1967.

⁶*Social and Economic Conditions of Negroes in the United States*. Washington, D. C.: U. S. Government Printing Office, BLS Report No. 332, Current Population Reports, Series P-23, No. 24, October, 1967, p. 46. See also James S. Coleman, et al. *Equality of Educational Opportunity*. Washington, D. C.: National Center for Educational Statistics, U. S. Government Printing Office, 1966.

⁷Twenty-eight percent of rural nonfarm youth and 23 percent of rural farm youth aged 14-24 in 1960 dropped out before graduating. This compares with 21 percent for urban youth. James D. Cowhig, *School Dropout Rates Among Farm and Nonfarm Youth: 1950-1960*. USDA Economic Report 101, October, 1966. See also U. S. Department of Health, Education and Welfare, *Rural Youth in Crisis: Facts, Myths, and Social Change*, pp. 134-143 for a discussion of "dropout" studies.

⁸Olaf F. Larson and Everett M. Rogers. "Rural Society in Transition: The American Setting," Pp. 23 in James H. Copp's (ed.) *Our Changing Rural Society: Perspectives and Trends*. Ames, Iowa: Iowa State University Press. See also Alvin L. Bertrand, "The Changing Power Structure in Agriculture as a

Dimension of Agrijustment," in James H. Copp's, *Projection Papers: Orientations for Rural Sociological Research and Action*. University Park, Pennsylvania: Rural Sociological Society, 1966, pp. 20-26.

⁹Perhaps the most rigorous analysis of this phenomenon is by Christopher Sower and Paul A. Miller, "The Changing Power Structure in Agriculture, An Analysis of Negative Versus Positive Organization of Power," in James H. Copp's (ed.), *Our Changing Rural Society: Perspectives and Trends*. Ames, Iowa: Iowa State University Press, pp. 127-158.

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**VOCATIONAL EDUCATION IN RURAL AMERICA:
AN EDUCATOR'S PERSPECTIVE**

by
Kenneth G. Densley

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VOCATIONAL EDUCATION IN RURAL AMERICA: AN EDUCATOR'S PERSPECTIVE

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Kenneth G. Densley

History

Man's vocational education efforts are as old as his early working efforts to satisfy his ever increasing needs and wants. Historically the apprenticeship was an important part of the educational program of early Egyptians, Babylonians, Hebrews, Greeks, and Romans. Early, apprenticeship found its way into the colonies of America.

The value of general education was seen and the compulsory school laws of the colonies made it necessary for masters and parents who were unable to read and write to send apprentices and children to school. (Roberts, 1957). Thus the comprehensive nature of our educational programs may be seen to have had an early beginning.

The comprehensive nature of our educational programs, however, has not always been in proper balance in preparing youth according to their needs and interests for occupations ranging from the unskilled to the professions. In its early development vocational education was a private responsibility. Expanding and advancing industrial technology forced in a greater sense the transfer of vocational education to the public schools even though the schools were not seeking the task. (Swanson 1958-59).

In early United States history much of the population was in rural settings. By 1920 less than one-half of the population was rural and in 1967, 70 percent of the people lived in cities and their suburbs (Beale 1967). (See Fig. 1.)

As the population shifted from rural to urban, educational systems of the cities enlarged and operations became complex. As techniques and methods developed, rural educators imposed the same type of curriculum, in the same type of facility found in urban schools, upon rural youth. A major deficiency in rural education has been the failure of educators to recognize differences in their situation and the accommodation of those differences. The small high school generally has a traditional and limited program. Additionally, the small school is not taking advantage of the potential that exists (Dunn, 1951; Ford, *et al*, 1967; Isenberg, 1959).

The scope of the typical high school educational program has been narrow in relation to needs. Rural schools have given little consideration to occupational training needs of the youth who migrate from rural to urban centers (The Advisory Council on Vocational Education 1968; Edmunds, 1969). Amberson (1968) found that vocational-technical education has not been available to all students that want, need, and can profit from programs. In general, balanced offerings or a comprehensive curriculum has not been available in high schools, as the emphasis has been on college preparation. As the school size decreases, available offerings decrease (Amberson, 1968; Bohrsen, 1965; Edmunds, 1969; Oliver, 1966).

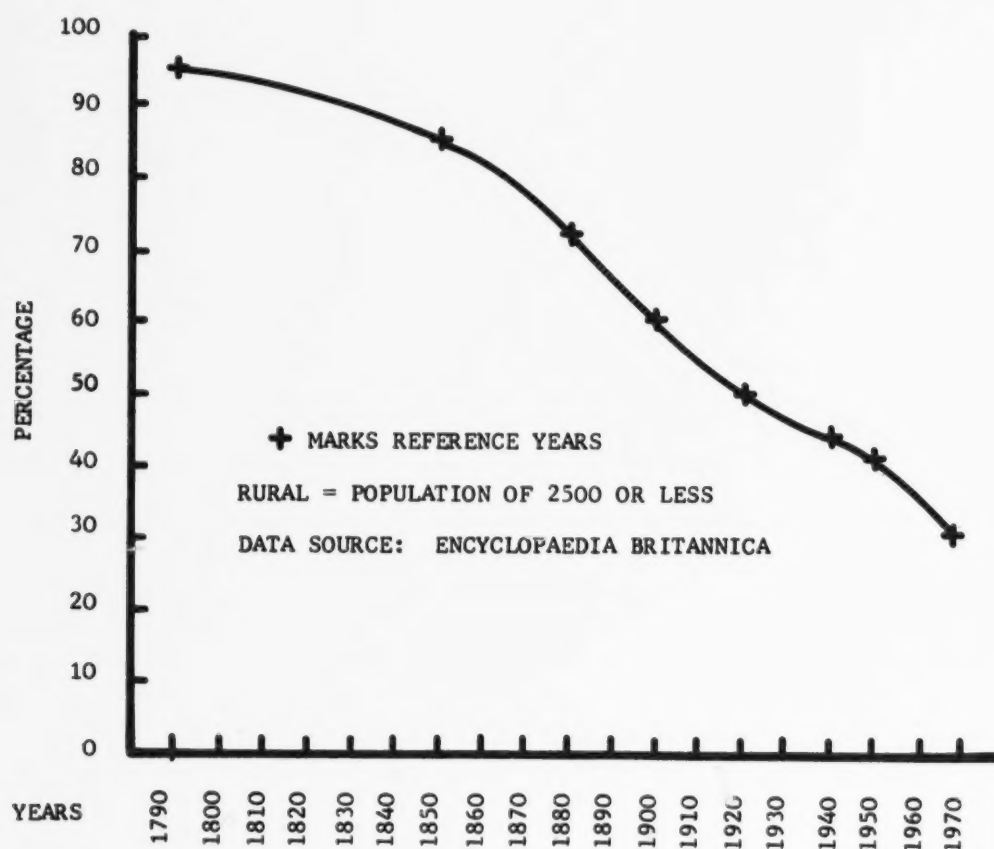


Fig. 1. Rural Depopulation

The predominant vocational offering in rural areas has been vocational agriculture, however, since 1950 the number of rural youth who do not live on farms have outnumbered those who do. Even before 1880 there were four states with less than 25 percent of the workers in agriculture, and by 1950 there were 22 states in this category. By 1960 only the Dakotas had more (33 percent) than 25 percent of their labor force in agriculture and there were 14 percent of the states with less than 5 percent of the total labor force in agriculture (Beale, 1967). The need for agricultural offerings still exists, however, with a shift in emphasis from production to off-farm agricultural occupations.

The percent of farm workers during the period of 1947 to 1966 was reduced from 14 to 5.2 percent, and blue collar workers dropped from 40.7 to 36.7 percent. During this same period white collar workers increased from 34.9 to 45 percent, and service workers from 10.4 to 13.1 percent (The Advisory Council on Vocational and Technical Educational, 1968). (See Fig. 2.)

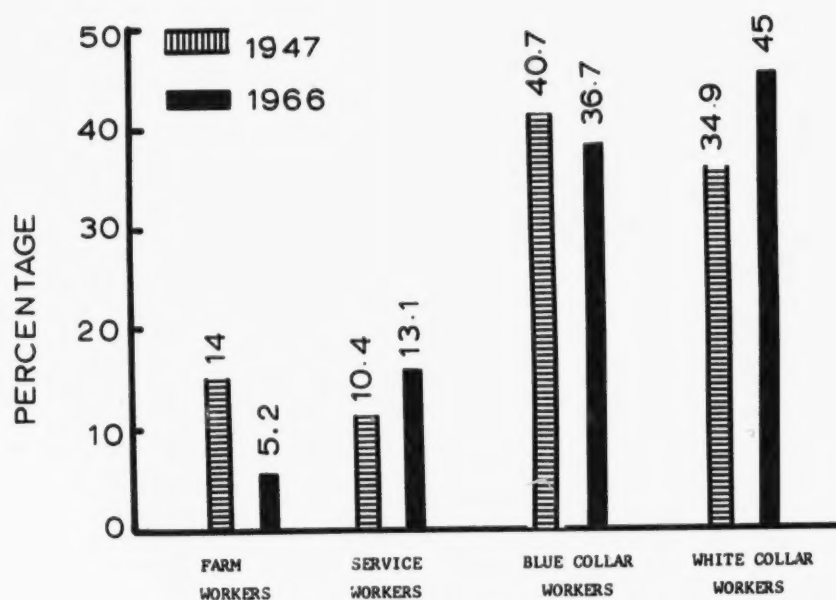


Fig. 2. Work Force Changes from 1947 to 1966

Swanson (1958-59) points out that the farm population is decreasing, but the rural population is increasing. Approximately two-thirds of the rural labor force at the present time are nonfarm workers and some rural residents work outside the community in which they live.

Beale (1967) states that there are two blue collar male rural workers to every farmer—a change from 1950 when the two groups were equal in number. For female rural workers the white collar area has the largest number of employees, and this was also true in 1950.

In addition to employment shifts, the population is still in motion. During the first half of the century the move was from rural to urban, with emphasis on the large city. Currently the shift is part way back, to the suburbs. The growth in the suburban population is six times the growth in cities. The importance to vocational educators is that business and industry is following the population into the outskirts, thus changing area employment patterns (Swanson, 1958-59).

Another factor of major historical importance to vocational education has been the compulsory school attendance laws. These laws introduced students into the school program with a complete new range of interests and aptitudes. Compulsory attendance brought greater changes to rural areas than elsewhere, with a resultant increase in problems (Swanson, 1958-59).

Current Conditions

Rural schools today are more traditional and resist change more than urban schools. Programs that were really never designed for the rural setting linger on in rural schools while in the urban setting where they were developed, adaptation and improvement has taken place (Advisory Council on Vocational Education, 1968; Dowler, 1967; Nolan, 1967; Bohrsen, 1965). One contributing

factor has been that educated rural youth seldom return to the rural setting and the older rural leadership often is opposed to initiation of new programs. Additionally small school systems have an inadequate tax base for providing innovation, and their vocational course offerings are often limited to vocational agriculture (Aller, 1967; The Advisory Council on Vocational Education, 1968).

Current technological advancements have important implications for vocational education especially in rural areas. There is less need today for the jack-of-all trades. Our industrial nation is becoming more specialized, more diversified, and more interdependent. Vocational education must expand and improve in rural areas; otherwise, migrating youth will be forced to accept low level employment (Swanson, 1958-59; Hull, *et al.*, 1967) or worse, unemployment. In the same vein, Dawson (1964) states that the future ranks of the unemployed will be filled from the ranks of the undereducated.

Cushman (1967) indicates that the rural school has a greater responsibility than the urban school because rural schools must prepare youth for the potential of either rural or urban living. Even though the need exists for rural schools to provide a wide range of offerings to meet the vocational and academic requirements it is generally known that the average per pupil expenditure is lower in rural schools than in urban schools (Hornbastel, 1963). This contributes to the fact that rural schools have not met academic, social, or vocational needs. Rural youth that migrate find they have been poorly prepared to compete with urban reared youth (Bauder and Burchinal, 1963; Haller, 1969; The Advisory Council on Vocational Education, 1968; Beale, 1967; Breathitt, 1967; James, 1963; Mawby, 1963; Rohde and Hall, 1968; Burchinal and Jacobson, 1963; Edmunds, 1969). Though rural youth rank far below urban standards, conditions improved greatly during the period 1950-1960, and currently the largest gains in educational level are taking place in rural areas and especially in the South (Beale, 1967; Nam and Powers, 1965).

Beale (1967) provided the following 1960 comparison of sixteen and seventeen year old exceptional rural and urban youth; 2.5 percent rural farm youth were accelerated compared with 4.8 percent urban and 2.5 percent rural nonfarm youth, and 17.4 percent of the rural farm youth were retarded compared with 13.1 percent urban and 19.4 percent rural nonfarm youth. (See Fig. 3.)

Many rural youth will, of preference or necessity, move to urban areas in pursuit of careers, but they will find they have poor educational preparation compared with urban youth (Burchinal, Haller, and Taves, 1962; Beale and Rice, 1963). This may in part be due to poor motivation. Rural students place less value on school, find school work less interesting, rank below urban students on measured intelligence, and aspire educationally and occupationally lower than urban students (Sewell, 1963). The programs may not be vocationally oriented enough to maintain student interest. This problem is national in scope for much of the urban unrest and problems in the urban ghetto originated in the fact that migrating rural youth were not prepared for urban society and occupations [Russell, 1965; Pearson, 1967; Breathitt, 1967 (a); Breathitt, 1967 (b); Fuller and Phipps, 1968 (b); Butler, 1965.]

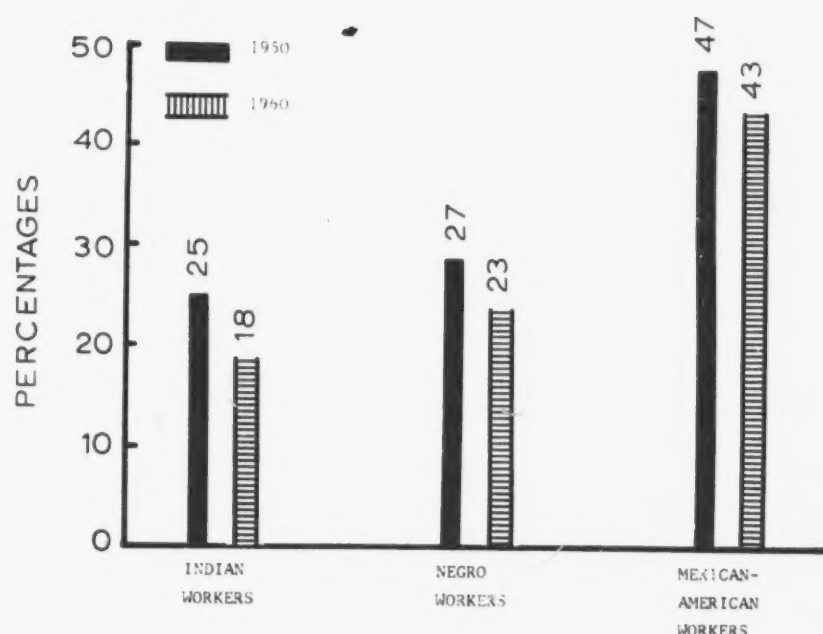


Fig. 3. Decline in Minority Group Rural Farm Workers

Burchinal, Haller, and Taves (1962) indicated rural farm youth were at another disadvantage when entering the urban labor market because they had not considered work other than farming, yet upon graduation farming opportunities were not present. They point out that less than ten percent of the nation's work force is in farming and that the number is declining. As an alternative, Thomas [1968 (a)], and Bjorker and Sledge, (1968), suggest agribusiness and off-farm agriculture occupations and training. Thomas (1968) states that management and organization is clearly the need of the future in agriculture.

In determining the degree of disadvantage of rural youth, Copp (1963) points out that though I.Q. tests are culture bound, they are biased toward the culture to which the rural child is likely to migrate. We must, therefore, be concerned with the disadvantages of the rural group as indicated through testing.

Other items contributing to the disadvantages rural youth have are the scarcity of reading material in the homes due to low socio-economic level and lower educational level of the residents. Rural adult males have two years less education than urban males, and women have a similar differential; however, women have a higher educational level than males. Additionally the displaced worker, the school dropout, the unemployed, and the underemployed are more prevalent in the rural areas of America (Copp, 1963; Dawson, 1963).

Currently, fewer rural women are employed than urban women. The old cliché, "A woman's place is in the home" still has an influence in rural communities, however, the number of working women is constantly increasing

(Swanson, 1958-59). Beale (1967) found in 1966 that for most occupations it is still a man's world, and that primarily women are employed as clerical and service workers, while farm workers are nearly all men. However, more and more vocational educators must plan to meet the needs of the increasing number of women who work (Swanson, 1958-59).

Special groups such as minorities and special disadvantaged youth are even more deprived in rural areas due to the lack of needed vocational programs. Mercure (1967) describes the inadequacy of the rural school to meet the need of the Spanish-American rural youth. He states that schools have lacked both the resources and creativity needed to provide for this minority group. Jones (1963) states that in our nation, cultural and social changes lag far behind technological advancements. Not enough concern is being expressed for the poor of the rural South. The Southern Negro needs educational and other opportunities that will enable him to compete for jobs and social status.

The lower the socio-economic level the greater the problem, and minorities are usually in the lower group. Miller (1968) found the Indian on the reservation received one-third to one-fourth the national average income. The Indian considers the primary tool for improvement of conditions is education and vocational education in particular. Of this disadvantaged group, Roessel (Nash, Ed., 1963) indicated that the Indian suffers more from indifference and apathy than he does discrimination. Indians want to preserve their culture, but at the same time learn a better way to make a living.

How do we "stack-up" when asked "are we getting the job done?" Mueller (1967) asked this at the National Outlook Conference on Rural Youth, and indicated we are falling short on most points. What will the future bring? The current trend is toward an awareness of the problems and to improvement. The trend will continue only if people care and act. Vocational education must play an important role in continuing the trend. Mueller calls for cooperative efforts.

Changing Technology

The expanding occupational areas are requiring the most education while low skill jobs are being phased out (Burchinal, Haller and Taves, 1962), additionally nonprofessional jobs are constantly requiring more education for entry level employment (James, 1963). Thomas (1966) states that studies and training should reflect the new and better jobs being created by technology. People must be trained for the future not for jobs that are being phased out.

Technological changes are also taking place in the farm industry affecting occupational education needs for those that remain in rural areas as well as for migrating youth. Farm output has been increasing six percent per year while employment needs have been dropping. Minority groups are also effected in declining labor needs. From 1950 to 1960 the percent of rural Negroes that were on farms decreased from 27 percent to 23 percent. Rural Indians on farms decreased from 25 percent to 18 percent and Mexican-American from 47 percent to 43 percent (Beale, 1967). (See Fig. 4.)

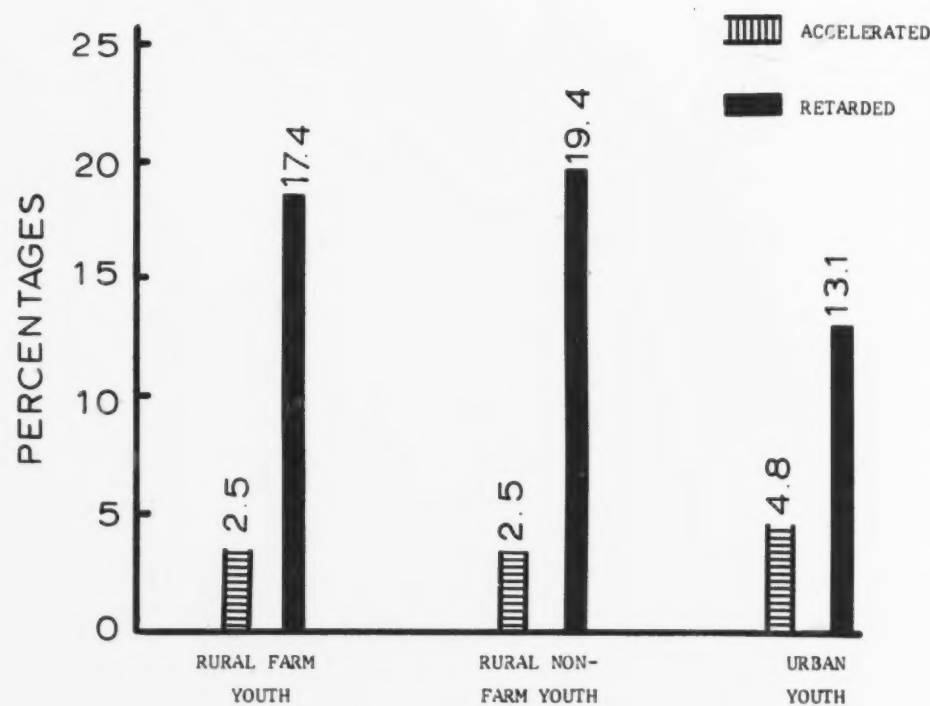


Fig. 4. Comparison of Rural and Urban Sixteen and Seventeen Year Old Accelerated and Retarded Youth in 1960

Technological advancements are also causing a need for changes in vocational education in rural areas because of improved highways and transportation equipment that enable nonfarm residents in rural areas to commute to urban jobs miles from their place of residence. Additionally industry is finding its way into rural areas, thus providing economic gains that result in financial ability to provide better rural schools (Micheels, 1959; Beale, 1967).

Retraining needs also result from technological progress. It has been repeatedly said that the workers entering employment today will require retraining for new jobs several times during their working years. Schools must provide programs of vocational education for the skills needed for the growing industries both for in-school and the jobless out-of-school youth (Aller, 1967; Cowhig, 1960).

Programs for Improvement

Kiefert (1966) suggests vocational education to cope with North Dakota's problem of rural youth leaving the state unprepared for urban life elsewhere. Vocational education is a public responsibility and must become part of the comprehensive high school. How can schools claim comprehensiveness if vocational education is not among the course offerings (Swanson, 1958-59)? The more extreme the rural area the less likely good vocational programs for the migrant can or will be offered, yet the rural areas lose a greater percent of their

youth through migration than does the small town and are least likely to have comprehensive programs (Burchinal, Haller and Taves, 1962).

In addition to training programs Hirengoff (1967) points out that most programs directed toward the rural to urban migration have been curative rather than preventive. He suggests an innovation in "sending" and "receiving" information pertaining to opportunities in the duties and characterization of the rural person so that the job and location would best be identified for assimilation of the youth. This idea would reduce the problems of in-migrants without jobs or with underemployment. Ramsey (1967) also suggests that both sending and receiving communities have roles to play in providing for successful migration of youth.

Sandmeyer and Warner (1968) state that low participation in the labor force is an integral part of a vicious circle which perpetuates poverty. Their report identifies important factors responsible for labor force participation rates. Building the rural area is a necessity. The family is an important unit in decision-making pertaining to labor force participation. This fact should be considered in program development.

Generally speaking, rural youth do not want to leave their home area but find it necessary due to economic conditions [Lindstrom, 1967 (a)]. Fuller and Phipps [1968 (c)] state that, though rural areas are disadvantaged in many ways, there are aspects of rural life that are satisfying to many rural people, even to those that are severely disadvantaged. Rather than cast all rural excess people into the problems of urban life, a more logical solution might be to improve undesirable aspects of rural areas through education and community building programs [Fuller and Phipps, 1968 (a) and (c); Review of Economic Opportunity Program, 1967; Nolan, 1967; Johnson, 1967].

In building rural areas one method would be to capitalize on the natural resources of the area for outdoor and recreational enterprises. Bird and Buis (1965) suggest sources of income for rural families. Robert Deal, the Vocational Coordinator and Dean at Columbia College, Columbia, California, has several programs in the planning stage to develop vocational programs to take advantage of the recreational areas of the region. Programs of this type will build the economic level of rural areas making available additional funds for educational programs. This provides cyclic growth. This trend will pick up momentum as economic levels rise and urban residents seek recreation in rural areas.

Crawford (1967) describes one communities' attempt to reduce several problems with one program. Co-op growers in the California community volunteered time and equipment to provide an orientation course to familiarize students with orchard equipment and safety. The program provided for an opportunity for summer employment for the youth and alleviated a seasonal worker shortage. Some students earned as high as \$700.00 for the summer enabling them to return to and remain in school for a longer period of time. The activity also gave them a greater understanding of the "World of Work."

Community involvement and support is necessary for success in developing vocational programs. Vocational Advisory Committees and other forms of involvement are recommended; yet, many teachers do not understand the nature

of vocational education and how the program contributes to the future of non-college bound youth. These items are especially important in view of the fact that the present small high school curriculum is not keeping pace with the demands of the urban industrial society (Kirkbride, 1968). For a report on the first five years of a complete community improvement program for a rural area in Puerto Rico, refer to Roberts (1963).

Thomas (1968 b) provides a rationale for area development programs under a concept of total education for action in sixteen merged Iowa areas. The document includes maps. This, an appendix to ERIC ED 023907 is part of a larger Iowa research and development project referred to elsewhere in this paper (note bibliography). Ryan (1966) also provides a report on extensive community involvement. The program in poor areas is a Federal and state responsibility. Ryan indicates, this problem is a priority item for society. Along this same line Shiffman (1967) requests an educational and social team and calls for community involvement with a return of the church to the center of community life.

Summary—Vocational Education in Rural America

Throughout history man has had the desire to improve his conditions. Education and training have been the most important factors in the efforts of man to provide for his ever increasing needs and wants. To provide for these needs both general education and vocational training have been needed, however, a proper balance to satisfy all needs is difficult to maintain.

Migration, population shifts, technological advancements, and economic conditions have all added to the complexity of the problem of providing quality vocational education in proper quantity. Because of migration urban centers can not disregard the training programs in rural areas because the product of rural schools if not properly trained create problems for urban centers.

The low socio-economic level in rural areas, poorly equipped schools, inadequate vocational facilities, lack of educational materials in homes, limited contact of the youth with the industrial world, and low educational level of residents are all conditions requiring improvement. These factors are inter-related and create enormous problems in providing appropriate vocational education in the rural setting. Correction of the problems will require total community and educational development programs.

Technological advancements are improving conditions, but the educators must not oversimplify solutions or try to convince themselves or the public that current programs are adequate. Much badly needed work remains to be done.

CURRICULUM

Curriculum Analysis

In analyzing vocational education programs one discovers there is no standardization of programs or terminology. Curriculum is developed as the needs of high school and post high school youth and adults arise. These needs are accelerated by such factors as automation, mechanization, urbanization, and

technological advances. These result in increased productivity and the creation of new jobs while others are eliminated. Thus, curriculum needs in vocational education are for more exacting skills and extensive knowledge (Knebel, 1963).

To provide such programs, schools need broadly based curricula in order to meet the needs of all students (Kirkbride, 1968). Merrick (1963) concurred. However, he indicated there is high job mobility and, in addition to the need for broadly based programs to provide for all students, there is a danger of specific training being too narrow. Individual training must have enough breadth to provide movement into new jobs as technology eliminates others.

The Advisory Council on Vocational Education (1968) stated that in general the curriculum of the public school has not been sufficiently comprehensive to meet the needs of all students. A major deficiency has been in a lack of vocational offerings at both high school and post high school levels in all states. This is especially true in rural areas. In a study of "Education for a Changing World of Work" (1963) it was pointed out that vocational offerings have been extremely limited, consisting primarily of agriculture, home economics, and office education. The study also indicated that the percentage of vocational enrollment and curriculum offerings decreased as the size of the community decreased. This was also reported by Swanson (1958-59).

The majority of the rural students will ultimately seek urban jobs, therefore, curricular offerings must be broad enough to prepare rural youth for urban employment and urban life (The Advisory Council on Vocational Education, 1968; Burchinal, Haller, and Taves, 1962). The Advisory Council on Vocational Education (1968) indicated that agriculture education enrollments rose five percent from 1964 to 1966, however, Aarnes (1961) stated that if the most modern technology and equipment were in current use in farming, employment needs would be cut in half and it is anticipated that needs will continue to be reduced. Breathitt (1967 a) indicates that farm employment is down 45 percent and production up 45 percent. Though the need for farmers declines, vocational agriculture persists in being the primary vocational education offering in rural areas. Local boards in small rural settings are inclined to see the local farming needs more than the needs of the youth that will be migrating due to a lack of employment potential in the rural area. The Advisory Council on Vocational Education (1968) states that increased agriculture offerings is, in part, due to the need for off-farm and agriculture-related occupational courses.

Consolidation

The Advisory Council on Vocational Education (1968) indicated that rural school districts were found to be too small to provide diversified curricula. They indicated that relief to the problem might be found in consolidation or providing area vocational schools. Much reorganization and consolidation has been accomplished, resulting in many large rural schools so that rural and small are no longer synonymous (Dawson, 1964). Actually the combining of small schools into larger units began over a century ago. Improved transportation increased the activity and aided in reducing the number of little red school houses.

Sweany (1967) points out that consolidation is not the answer in some areas where weather, long distances, or other conditions make transportation difficult. Under conditions when consolidation is not feasible, Isenberg (1963) says special steps should be taken to use advanced educational techniques and media.

Hoffer (1964) pointed out the changes made due to modern communication, transportation, increases in part-time farming, and non-farm residents of rural areas have caused a shift in emphasis from area to interest. He indicated the decline in population of open country, more complex educational systems, specialized educational media and staff have caused a move to increased consolidation of school districts. He stated that consolidation is a definite trend, as did Aarnes (1961); however, consolidation may not always be the only answer. Haggerty, Director of the Oregon Small High School Program, stated that many small schools do not need to exist, however, blanket closure could do irreparable harm in some cases. He pointed out that today's technology makes it possible to overcome most of the former weaknesses of small schools in rural areas. In fact they may be turned into advantages. One advantage is that small schools have an individualized approach to education that is not available in most large impersonal urban schools (Burns, 1968). However, Ford (*et al*, 1967) concludes that the advantages found in the small rural high schools studied were outweighed by disadvantages that arise from outdated and inadequate curricula, methodology, and from facilities which are too limited. Benefits of rural environment should be emphasized and used while correcting for disadvantages.

Among the advantages, Christensen (1965) found that employers believed farm-reared people had learned good work habits and developed other characteristics that make them good employees. However, from another point of view, the employers indicated that these people had limited opportunities to develop a background in non-farm businesses. They believed curriculum changes should be made to provide broad vocational and technical programs to enable the rural student to be prepared for successful employment in various occupations for which they may be suited.

Amberson (1968) recommended that for schools limited by virtue of geographical isolation, school size, and other related factors, special approaches should be sought. He provided the following examples:

- 1) sharing vocational education services between schools,
- 2) sharing vocational education teachers between schools,
- 3) sharing vocational education counselors between schools,
- 4) providing special financial inducements to schools for offering quality vocational education programs, and
- 5) simulating vocational education programs, coordinated by general or vocational teachers, so that youth might develop competencies desirable and necessary for entry into occupations.

Readers planning to study reorganization may want to review a Georgia document pertaining to evaluation of existing conditions with reorganization considerations (Organization of School Systems in Georgia, 1965).

Each situation requires study, consolidation may provide increased curriculum offerings, but may have other extreme disadvantages. The rural small school should take advantage of its natural potential. Burns (1968) stated that small schools have a potential for offering an individualized approach to education normally not available in the traditionally large impersonal urban school. Conditions should, if possible, be adjusted to accommodate disadvantages of small schools. Ward (1967) found that there was a relationship between the size of school attended and the occupation obtained, with students from larger schools entering farming less, entering professional and technical areas more, supplementing their income less often, and holding more positions.

Vocational Offerings in the Small High School

The United States is the only country in the world in which the majority of the youth complete high school (Nam and Powers, 1963), creating a great need for comprehensive schools to accommodate diverse student needs. Knebel (1963) and Swenson (1969) state that educational programs in the small rural high school are traditional in nature and are not adequately vocational and general. Rather, they are academic for preparing youth for college entrance. Swenson (1969) indicates that it is no more tenable in the rural community than it is for students in the city.

In an eastern Kentucky study, Yomans (1963) found schools were doing well in preparing youth for roles in rural areas, but were not doing as well for the youth who migrated to urban centers. As previously stated vocational offerings are inadequate. Sweany (1967) states that course selection is so limited that many vocational students are taking courses just because they are the only thing offered associated to their interests. He recommends a high school program that provides basic vocational education for clusters of jobs. Important work in the cluster concept has been done by Maley (1966) who believes that this concept may be readily utilized in small high schools.

Another deficiency in rural areas is the fact that offerings usually consist only of pre-employment training; whereas, urban schools offer concentrated short-term, part-time, evening school, etc. (Knebel, 1963). Amberson (1968) found that as school size increased the number of vocational offerings increased, but on the other hand he also found that as school size increased the percentage of students enrolled in vocational education decreased markedly.

It has been previously mentioned that the need for farm workers is declining. Thomas (1968 a) points out that high school agricultural vocational offerings should be expanding into agribusiness and off-farm agriculture programs on a very broad basis to accommodate changing conditions.

Post High School

Previously the reader's attention was called to the nation's rapidly advancing technology. Technological changes are responsible for the unemployment of

many individuals who want work, but are not trained for current job demands (Lollis, 1966). Thomas (1966) indicates that these conditions call for education from the cradle to the grave with an opportunity for work entry and re-entry at key points. Vocational and technical education must be an integral part of this total educational process.

Facilities and programs are inadequate for existing needs and must be improved and expanded (Sewell, 1963; Cushman, 1967). The inadequate vocational program in the rural school increases the dropout rate because youth do not see enough immediate value to the program. Schreiber (1963) reports that more dropouts than graduates would do things differently if they could start their program over; however, vocational offerings and guidance continue to be lacking in rural areas.

Horner (*et al.*, 1967) found the rural post-high student to be more concerned with learning a specific vocation and less concerned with achieving high grades than were urban youth. As in the case of high school, post-high needs in rural areas are for more vocational offerings to provide for the interests of the students.

Knebel (1963) indicates that many authorities believe that technical education is best offered at the post-high level and that the community college is the best means of providing post-high school education. He also points out that the programs are becoming more and more technical as industrial advances are made. This increases the cost of programs further reducing their availability in rural areas, but Knebel (1963) indicates that even at high prices, programs may prove to be a sound investment in people and the welfare and economy of the nation. Many studies of costs and return have been conducted which clearly show the value of vocational education as an investment; however, they will not be reported here because they are not specifically rural school studies. The reader may want to refer to the work of Loren Ihnen, North Carolina State University; Einar Hardin, Sigmund Nosow, and Michael Borus, Michigan State University; Schultz and Denison, University of Chicago; Wilbur Smith, University of Wisconsin; Mark Leiserson, Yale University; Daniel Rogers, Yale University; Corrizinni, Princeton University; Jacob Kaufman, Pennsylvania State University, and J. Robert Warmbrod, The Ohio State University.

Another element of cost is presented by Moore (1964) as he points out that the low income of farmers is one reason why many farmers are unable to provide post-high school education for their children. Expenses are reduced when the college is near home and, as Swanson (1958-59) points out, the increasing number of junior or community colleges is providing greater opportunities to rural students.

Parents influence their children's desire for post-high school education and Shill (1968 b) found that parents of students who had taken vocational agriculture in school did not want their sons to obtain a college degree as much as parents of youth that had not taken vocational agriculture. However, they did want their sons to take business school, vocational school, or junior college programs more than did parents of nonvocational agriculture students. Nam and Powers (1963) discuss several related factors pertaining to parental influence.

One is the marked difference of the educational level of rural parents influencing earning power and the general socio-economic level. This influence is also carried over to tax base and ability to provide programs as well as the interest and attitude of the youth.

It has been indicated that American high schools are not adequately comprehensive, especially, in rural areas. This is also true of the community college. Eldridge (1967) reported that in 1964 only 20 of the 70 California community colleges offered training in agriculture, but in 1967 the number had increased to 60. In the case of agriculture an increase in offerings has been in off-farm agriculture. A suggestion to the problem of comprehensiveness was made by Eldridge to offer short courses and regional programs in the community college.

Use of Advisory Committee

Amberson (1968), in his study of 850 high schools in northwestern states, found that less than one-third were using advisory committees and that the advisory committee was less evident in the small school. Much as been written about advisory committees, though this compiler was unable to find materials specifically pertaining to rural schools. There is a need for active use of advisory committees in vocational education and this need is likely to be as great in rural areas as in the urban setting.

Work Experience

Work-experience programs appear to hold great promise for vocational education (Swenson, 1969), this appears especially true in rural areas where equipment costs are prohibitive for the inadequate tax base, and it appears that more and more work-experience programs are to be expected in the future (Swanson, 1958-59).

The Evaluative Study Committee (1969) of work-experience education in Santa Barbara stated that a primary purpose of work-experience education was to provide a sound basis for an informed career choice. They indicated a prerequisite was adequate vocational guidance prior to placement in the training station. One problem identified in operating the program was transportation to the training station. Transportation would likely be a greater problem in rural areas.

Huffman (1966) states that work-experience programs offer much for rural areas. The document referred to here, though not specifically for rural education, provides valuable information pertaining to work-experience of cooperative education and is recommended to readers considering such programs or desiring to improve existing programs.

Christensen (1965) found that almost all of the employers in his study that were in large firms or were department heads in government agencies recognized on-the-job training as a valuable part of a total vocational training program. These employers said work-experience programs provide the employer with the opportunity to choose employees who have the training and have proven they have the personal attributes to make contributions to the firm as a permanent

employee. It also gives the employee an opportunity to learn responsibilities and life situations that the classroom cannot provide. Coombs (1962) also found on-the-job training to be an important aspect of the vocational program in the training of Indians.

Aller (1967) indicated that the Neighborhood Youth Corp found work-experience programs desirable in allowing youth to test job interests in an urban environment. Stutz (1967) also indicated work-experience opportunities were valuable in career selection programs.

An important deterrent to the expansion of work-experience programs in rural areas appears to be obtaining work-experience coordinators. Schools are usually small in rural areas and several specialists in specific areas cannot be accommodated. Finding a person versatile enough to work well in all fields is a difficult if not impossible task (Swenson, 1969).

Mobility

Considering the high degree of mobility of the population today, rural schools cannot be content to provide a program to meet the needs of their own local area. Christensen (*et al.*, 1962) found that 10 months after graduation 60 percent of the rural youth that did not go to college were not living in the county where they were reared. Similar mobility findings were made by Mahlstede and Thomas (1968 b) in a study of 224 Iowa dropouts in which they reported that one-half had left the state. In a study of 102 that remained in Iowa, all were still in the state and one-half were still in the same county where they attended high school. The youth had been out of school 6-14 years. Aikin (n.d.) also points out that studies indicate that due to the diversity of the economy, the mobility of the labor force, and the increasing demand for occupationally competent high school graduates, high schools must provide students with salable employment skills not only for the local employment market, but the area, state, and national market.

Studies indicate, however, that rural youth want to remain in home areas, but many must move in search of employment. Roper and associates (1963) and Noland (1968) found the search for suitable employment the largest single factor for changes in residence. In fact, Sewell and Orenstein (1965) indicate that rural and small-town migrants actually experience less occupational mobility than do native urbanites even though rural youth have a greater need because of a lack of opportunity.

Wilber (1963) found that overpopulation compared with resources and other socio-economic factors were propelling forces for rural to urban migration. Another propelling factor found by Wilber was the favorable or unfavorable family relations of the youth. Recognizing the need for the mobility of rural youth due to many factors, Wall (1968) recommends longitudinal, panel-type studies pertaining to this aid to mobility.

The cost of noise, congestion and impersonality of urban life appear to be worth it to the rural to urban migrant in order to improve in socio-economic status (Bauder and Burchinal, 1963), and Ramsey (1967) points out that the recognized pattern of mobility will continue; therefore, rural schools must

prepare youth for urban living. However, as previously presented in this paper there are numerous findings that indicate this preparation has not been adequate.

Bauder and Burchinal (1963) found that rural-migrants generally participate less fully in formal social organizations than urban-migrants or persons who have always lived in the city, and that the migrant frequently clings to friends who may have preceded them to the city. This may cushion the shock of adjustment, but it may also delay ultimate adjustment. Adequate vocational and social preparation is necessary to improve the transition process. Aller (1967) agrees with this need for aiding the migrant but points out that we must not concentrate efforts in this area at the expense of providing broader programs aimed at developing growth and economic viability in rural areas.

It is easy to see that the problems and cures are all closely related, with one affecting the other. The Advisory Council on Vocational Education (1968) states that the lack of rural businesses and industries fosters out-migration of youth unprepared for urban living. The larger the city migrated to, the less likely the youth are prepared. They move into cities of all sizes, but migration is especially into the large cities. Additionally Lindstrom (1967 b) states that he questions the wisdom of 16-21 year old rural youth migrating to urban centers shortly after graduating from high school because they are not equipped to handle themselves in the city. He said they are not even prepared to make intelligent use of the Employment Service. Yet on the other side of the picture, Beale (1967) indicates that it is the unestablished young in their most productive years that are most likely to migrate.

Lack of industry and business creates a poor economy not capable of supporting the youth desiring to enter the labor market. This same poor economy is a deterrent to good vocational programs to prepare rural youth for employment as they migrate to the city. Educators may and should make many curricular adjustments to accommodate youth that will migrate.

Summary—Curriculum

All workers need some kind of special training for a successful working life. Many youth do not obtain education beyond high school; thereby, making it necessary that the high school must provide a comprehensive program consisting of a general program, a college-entrance program, and a vocational education program. It is in the latter area that many high school curricular programs fall far short and this is especially true in the small school.

One solution to the problem has been consolidation. Efforts in this direction began over a century ago and much has been studied and written pertaining to community resistance, considerations, and steps to be taken. Where consolidation is not feasible much can be done by way of modern technology to improve the curriculum of small schools. This usually involves increased funds. Increasing funds to operate small schools should not, however, be permitted to act as a deterrent to the closure of small schools where practicable.

Small schools do have some advantages and employers have recognized the virtues of employees reared in rural areas. These advantages should be capitalized